UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,949	11/24/2003	Donna K. Hodges	BS030347	5272

38516   7590   02/01/2008
SCOTT P. ZIMMERMAN PLLC
PO BOX 3822
CARY, NC 27519

EXAMINER
SIKRI, ANISH

ART UNIT	PAPER NUMBER
2143	

MAIL DATE	DELIVERY MODE
02/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/720,949	HODGES ET AL.
	Examiner	Art Unit	
	Anish Sikri	2143	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>16 November 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 November 2003</u> is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>11/16/2007</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement submitted on 11/16/2007 been considered by the Examiner and made of record in the application file.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/09/2007 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under

section 122(b), by another filed in the United States before the invention by the

applicant for patent or (2) a patent granted on an application for patent by

another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application

filed in the United States only if the international application designated the

United States and was published under Article 21(2) of such treaty in the English

language.

Claims **1-8** are rejected under 35 U.S.C 102(e) as being unpatentable over

Logan et al (US Pub 2003/0093790).

Consider Claim 1, Logan et al discloses a method, comprising: receiving a first

data stream at a computer, the first data stream comprising packets of data packetized

according to a packet protocol (Logan et al, [0015]-[0016], [0054]); recursively

segmenting the first data stream into segments (Logan et al, [0067]-[0070], [0080]-

[0086]), such that a characteristic of a preceding segment determines how a current

segment is segmented (Logan et al, [0067]-[0070], [0080]-[0086]); recognizing a

repetitive segment and inserting a data compression result of a preceding segment to

reduce processing of redundant segments (Logan et al, [0058]); dispersing at least one

of the segments via a network for a subsequent processing service; (Logan et al,

[0065], [0096]) receiving a result of the processing service (Logan et al, [0065], [0096]-

[0101]); aggregating the result of the processing service and an unprocessed segment

into a second data stream; and communicating the second data stream via the network

(Logan et al, [0065], [0096]-[0101]).

Consider Claim 2, Logan et al discloses the method according to claim 1,

wherein recursively segmenting the first data stream comprises observing a sequence

of packets having a similar structure to a previous sequence of packets and segmenting

the sequence of packets to have similar content to the previous sequence of packets

(Logan et al, [0067]-[0070], [0080]-[0086]).

Consider Claim 3, Logan et al discloses the method according to claim 1,

wherein recursively segmenting the first data stream comprises using a chronological

characteristic of the preceding segment to describe the current segment (Logan et al,

[0067]-[0070], [0080]-[0086]).

Consider Claim 4, Logan et al discloses the method according to claim 1, further

comprising replacing a complex segment with a common descriptor to produce an

abbreviated annotation (Logan et al, [0080]-[0086]).

Consider Claim 5, Logan et al discloses the method according to claim 1, further

comprising accruing historical routing information for a segment, the historical routing

information describing at least one destination of the segment as the segment travels

via the network (Logan et al, [0092]-[0093], [0129], [0294]).

Consider Claim 6, Logan et al discloses the method according to claim 5, further

comprising assembling the second data stream using the historical routing information

for the segment (Logan et al, [0294]-[0297]).

Consider Claim 7, Logan et al discloses the method according to claim 1, further

comprising accruing historical processing information for a segment, the historical

processing information describing at least one process performed on the segment

(Logan et al, [0294]-[0297]).

Consider Claim 8, Logan et al discloses the method according to claim 7, further

comprising assembling the second data stream using the historical processing

information for the segment (Logan et al, [0294]-[0297]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 .

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating
    obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Claims **9-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Logan et al (US Pub 2003/0093790), in view of Daniels (US Pat 6,285,871).

Consider Claim 9, Logan et al discloses a method of providing communications

services, comprising: receiving a request for communications service (Logan et al,

[0015]-[0016], [0054], the request for communications service originating from a user's

client device (Logan et al, [0299]-[0310], [0426]), the request for communications

service communicating via a communications network to a service provider (Logan et al,

[0240], [0422]-[0423], [0461]).

the data received as packets of data packetized according to a packet protocol

(Logan et al, [0015]-[0016], [0054]); recursively segmenting the packets of data into

segments according to a segmentation profile stored in memory (Logan et al, [0117]-

[0118], [0258]), the segmentation profile storing rules that define actions when a similar

characteristic between segments is encountered (Logan et al, [0240], [0422]-[0423],

[0461]), such that a characteristic of a preceding segment determines how a current

segment is segmented (Logan et al, [0067]-[0070], [0080]-[0086]);

recognizing a repetitive segment and inserting a data compression result of a preceding

segment to reduce processing of redundant segments (Logan et al, [0058]);

when a common processing service is required (Logan et al, [0065], [0096]), then

grouping together individual packets of data as a new segment (Logan et al, [0065],

[0096]), each of the individual packets in the new segment requiring the common

processing service dispersing at least one of the segments via a network for a subsequent processing service (Logan et al, [0065], [0096]-[0101]); dispersing the new segment via the network to receive the common processing service (Logan et al, [0065], [0096]-[0101]); receiving results of the subsequent processing service (Logan et al, [0065], [0096]-[0101]); receiving a result of the common processing service (Logan et al, [0065], [0096]-[0101]); assembling a data stream, the comprising i) the results of the subsequent processing service (Logan et al, [0065], [0096]-[0101]) and ii) an unprocessed recursively segmented segment (Logan et al, [0065], [0096]-[0101]) and iii) the results of the common processing service (Logan et al, [0065], [0096]-[0101]); and communicating the assembled data stream via the network to fulfill the requested communication service (Logan et al, [0065], [0096]-[0101]).

But Logan et al fails to disclose querying a payment history database for historical payment information relating to the user's history of payments to creditors; querying a usage history database for historical usage information relating to the user's past usage of communications services; querying a credit datable, for credit information relating to a line of credit with a credit card issuer; based on the historical payment information, the historical usage information, and the credit information, determining that the user can be trusted to pay for the requested communications service, even though the total bill is undetermined receiving data at a computer.

Nonetheless, Daniels discloses the querying a payment history database for historical payment information relating to the user's history of payments to creditors (Daniels, Col 4 Lines 37-67, Col 5 Lines 1-6); querying a usage history database for

historical usage information relating to the user's past usage of communications services (Daniels, Col 4 Lines 37-67, Col 5 Lines 1-6); querying a credit datable, for credit information relating to a line of credit with a credit card issuer (Daniels, Col 4 Lines 37-67, Col 5 Lines 1-6); based on the historical payment information, the historical usage information, and the credit information (Daniels, Col 4 Lines 37-67, Col 5 Lines 1-6), determining that the user can be trusted to pay for the requested communications service (Daniels, Col 6 Lines 48-59), even though the total bill is undetermined receiving data at a computer (Daniels, Col 4 Lines 37-67, Col 5 Lines 1-6).

However, Daniels discloses that still subscribers may be frequent roamers with established credit history and thus can be allowed to roam everywhere (full network access), without the need for additional authentication. Whereas less frequent users of the network (restricted network access).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the invention of Logan et al, to include the feature of Daniel's in order to reduce the credit risk to providers.

Consider Claim 10, Logan et al, in view of Daniels discloses the method according to claim 9, further comprising communicating the assembled data stream to a client communication device (Logan et al, [0294]-[0297]).

Consider Claim 11, Logan et al, in view of Daniels discloses the method according to claim 9, further comprising receiving a request for the assembled data stream (Logan et al, [0294]-[0297]).

Consider Claim 12, Logan et al, in view of Daniels discloses the method according to claim 9, wherein recursively segmenting the first data stream comprises using a chronological characteristic of one segment to describe another segment (Logan et al, [0067]-[0070], [0080]-[0086]).

Consider Claim 13, Logan et al, in view of Daniels discloses the method according to claim 9, wherein recursively segmenting the first data stream comprises recognizing a repetitive segment and inserting a data compression result of a preceding segment to reduce processing of redundant segments (Logan et al, [0058]).

Consider Claim 14, Logan et al, in view of Daniels discloses the method according to claim 9, wherein recursively segmenting the first data stream comprises observing a sequence of packets having a similar structure to a previous sequence of packets and segmenting the sequence of packets to have similar content to the previous sequence of packets (Logan et al, [0067]-[0070], [0080]-[0086])..

Consider Claim 15, Logan et al, in view of Daniels, discloses the method according to claim 9, further comprising accruing historical routing information for a

segment, the historical routing information describing at least one destination of the

segment as the segment travels via the network (Logan et al, [0092]-[0093], [0129],

[0294]).

Consider Claim 16, Logan et al, in view of Daniels, discloses the method

according to claim 15, further comprising assembling the second data stream using the

historical routing information for the segment (Logan et al, [0294]-[0297]).

Consider Claim 17, Logan et al, in view of Daniels, the discloses the method

according to claim 9, further comprising accruing historical processing information for a

segment, the historical processing information describing at least one process

performed on the segment (Logan et al, [0294]-[0297])

Consider Claim 18, Logan et al, in view of Daniels, the method according to claim

17, further comprising assembling the second data stream using the historical

processing information for the segment (Logan et al, [0294]-[0297])

Claims 19, and 20 have similar limitations as to claim 9, therefore they both are

rejected under the same rational as to claim 9.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Sikri whose telephone number is 571-270-1783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anish Sikri
a.s.

January 30, 2008